



State Of Utah Ensign Bickford (Trojan Plant) Groundwater Cleanup

Public Notice of Settlement

December 2006

The Executive Secretary of the Utah Water Quality Board and the Natural Resources Trustee for Utah have reached final agreement on two settlements with The Ensign-Bickford Company (EBCo) regarding cleanup of groundwater contamination in the Mapleton, Utah area. This notice is provided to inform the public of the agreements and the intent to sign these agreements at the conclusion of a 30-day notice period, ending January 22, 2007.

Two proposed agreements, totaling just under \$12 million, were presented for public comment in August/September 2004. Negotiated by the State of Utah and EBCo, the proposals addressed clean up and settlement of the State's claim for damages to groundwater resulting from activities at the Trojan facility in Spanish Fork. After public comments were considered, formal responses were prepared and are available to the public as indicated on the last page of this fact sheet. The Executive Secretary and the Trustee chose to delay signing final agreements in 2004 and attempt to facilitate further resolution of concerns. While the Addendum and Consent Agreement remained in draft, EBCo continued the groundwater aquifer treatment program and site cleanup at the Trojan Facility. Based on this work and discussions with EBCo and the City of Mapleton, and in consideration of the earlier public comments, the agreements have been modified.

The agreements include \$9.375 million in financial assurance for pumping and treating the groundwater and a \$2.58 million trust fund for natural resource damage. The trust fund will be used to "restore, replace, or acquire the equivalent" of the lost water for the benefit of the public in the impacted area.

Two modifications have been made to the agreements as originally proposed. First, the financial assurance provision for the \$9.375 million has been changed from a corporate guarantee to an irrevocable letter of credit for the entire amount. Second, the provision requiring a three-year period for use of the \$2.58 million trust fund only for projects jointly proposed by a purveyor of municipal water and EBCo has been eliminated.

Federal and state laws give the Utah Department of Environmental Quality (DEQ) Executive Director, as Trustee, the authority to file a claim when a natural resource of the State is damaged. In this case, the injury to groundwater occurred as a result of release of contaminants to groundwater from years of waste disposal practices and from pond seepage and failures in the late 1980s at the site. State law also gives authority to the Utah Water Quality Board to require corrective action for contamination of waters of the State, to include groundwater.

This fact sheet summarizes the provisions of the agreements. Visit our website to view the agreements.

Overview

The EBCo Trojan plant manufactured explosives at the Spanish Fork site until February, 2006. Some of the contaminants seen in the groundwater are unique to this operation. It is not certain when the groundwater contamination began, but it most likely occurred over the operational history of the Trojan plant. A major change occurred in 1990 when the State approved a plan to pre-treat wastewater discharged from the plant, reducing the release of contaminants from the plant. This pre-treated water is then conveyed to the Spanish Fork Publicly Owned Treatment Works (wastewater treatment plant).

Ongoing studies indicate that EBCo's current impact to the groundwater is minimal in comparison to historical discharges. No wastewater is currently being disposed of on the plant property. EBCo has ceased operations at the site and there is currently ongoing cleanup of the site.

The contaminated groundwater forms a plume that begins at the northern end of the Trojan site and extends to Mapleton City Well No. 1, west to State Route 147, and east to the Wasatch Fault. The contaminants have entered both the confined and unconfined aquifers. The shallow groundwater is situated in an unconfined aquifer. The lower aquifer is confined until it reaches the area of the Wasatch Fault, where the confinement becomes discontinuous. The damage to the natural resource is primarily in the lower aquifer – the source of drinking water.

The Agreements

Two agreements outline the settlement provisions.

The **Addendum Agreement** provides for implementation of a Corrective Action Plan and includes a financial assurance irrevocable letter of credit of \$9,375,000 to implement the Corrective Action Plan for at least 20 years. Costs will include operation and maintenance of the three water treatment systems, ongoing monitoring of contaminant concentrations in the plume, and ongoing analysis of the treated water to ensure efficiency of the treatment systems.

Under the **Consent Agreement**, EBCo will pay the State Natural Resource Damage Trustee (the DEQ Executive Director) \$2.58 million in cash for natural resource damages. This money will be placed in a Trust Fund and is immediately available to be used to "restore, replace, or acquire the equivalent of the groundwater resources for the benefit of the public in the Affected Area" as provided under federal law.

Under any proposal, EBCo cannot receive or beneficially use any of the water resources provided to the public unless those resources are purchased at market rates.

Important to Note: The agreements are between the State and EBCo, and the settlement deals strictly with loss of the water for public use. The agreements do not settle the claims of individuals or entities that are not directly a party to the agreements. Those individuals and entities retain their rights to deal directly with EBCo to settle any claims.

Also, the State Engineer will allocate the right to use the surface or groundwater resources by the public, pursuant to Utah water law.

The Corrective Action Plan

The agreements reference the Corrective Action Plan (CAP).

EBCo consultants measured the magnitude and extent of the plume, with DEQ oversight. DEQ approved all sampling plans and took “split” samples, which were evaluated by a separate lab to ensure accurate results. From this information, EBCo submitted a CAP in 2002. The CAP details how the contaminants are to be removed from the groundwater. Federal and state standards must be met and a useable source of drinking water must be provided to the public. It expands on the interim measures that have been taken, since 1998, to address the problem.

Institutional controls have been implemented to help protect the public from improper use of contaminated groundwater. Mapleton requires existing residences located within the impacted zone and all new housing construction within the city to be connected to the municipal water system.

Five extraction wells currently pull water from the plume. These wells are located as follows:

- Mapleton No. 1 Well - next to Mapleton City Hall;
- Orton-23 Well - approximately 750 East and 1600 South in Mapleton;
- Recovery Well R1 - northeast corner of the EBCo site;
- Recovery Well R2 - east of the PacifiCorp electric substation in Spanish Fork; and
- Recovery Well R3 - on the Orton Property in south Mapleton.

The Utah Division of Water Rights determined the Safe Annual Yield – the amount of water that could be extracted from the aquifer without mining or affecting down gradient water rights in the aquifer – to be 4,100 acre-feet per year. EBCo was required to obtain water rights for the impacted area before treatment could begin.

Extracted water can be sent to one of three treatment plants built to provide drinking-quality water to Mapleton and Spanish Fork cities. At each treatment plant, water is pushed through Granular Activated Carbon columns, which remove the contaminants. Frequent sampling and analysis assures that the treated water is below the laboratory detection limit for all suspected contaminants.

It has been estimated that this pump and treat system will operate until the groundwater meets corrective action standards, a minimum of 20 years. Progress is reviewed annually, and if necessary, additional wells can be placed on line and old ones removed.

Treated water from the North Section now goes to Mapleton City's secondary irrigation system. Any water not used is discharged to Hobbie Creek. Treated water from the South Section goes to Spanish Fork's secondary irrigation system. Any water not used is discharged to the Spanish Fork River.

REVIEW OF DOCUMENTS

Copies of the Comment Response Summary, the Agreements, the groundwater Corrective Action Plan, and related documents are available online at <http://www.deq.utah.gov/Issues/EBCo>

Hard copies are available for review during regular business hours, Monday through Friday, at:

Mapleton City Offices
125 W. 400 North
Contact: Camille Brown
Phone: 801-806-9106

Utah Division of Water Quality
288 North 1460 West, SLC
Contact: Jeff Studenka
Phone: 801-538-6779
E-mail to: jstudenka@utah.gov

CONTACTS – If you'd like more information, contact any one of us:

Dianne R. Nielson, Ph.D.
NRD Trustee/DEQ Exec. Dir.
801-536-4402
nrdtrustee@utah.gov

Keith Eagan
DEQ Project Manager
801-538-6017
keagan@utah.gov

Fred Nelson
Asst. Attorney General
801-366-0290
fnelson@utah.gov



STATE OF UTAH
DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Planning and Public Affairs
168 North 1950 West
PO Box 144810
Salt Lake City, Utah 84114-4810

PRSRT STD
U.S. Postage
PAID
Salt Lake City, UT
Permit No. 4621

POSTAL CUSTOMER
MAPLETON UT 84664